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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/328,749	06/09/1999	JEFFREY E. GEBHARD	ADI-005	7235

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EXAMINER

STASHICK, ANTHONY D

ART UNIT	PAPER NUMBER
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3728

DATE MAILED: 12/06/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/328,749

Applicant(s)

GEBHARD, JEFFREY E.

Examiner

Anthony D Stashick

Art Unit

3728

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 September 2001.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: |

Art Unit: 3728

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 9-10, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coplans 3,550,597 in view of Dubner 3,903,621 and Kraeuter et al. 5,915,820. Coplans '597 discloses substantially all the limitations of the claims including the following: a torsion system 15; forefoot portion 17; rear foot portion 16; intermediate portion 18; intermediate portion coupling forefoot and rear foot portion together (see Figures); intermediate portion made of material to allow for rotation of forefoot portion relative to rear foot portion about the longitudinal line of the system (see Figures 4, 6, 12 and 13); forefoot, rear foot, and intermediate portions form a single plate (see Figure 1); the single plate is substantially rigid in a horizontal plane (see column 3, lines 40-42), the width of the intermediate portion is less than that of the rear and forefoot portions (see Figures 11, 2, 4, 12, 13, and 15). Coplans '597 does not teach or show that the forefoot portion of the torsion system spans the entire forefoot area of the sole or the forefoot portion having a generally smooth concave contour along the longitudinal axis. Dubner '621 shows that a supportive innersole device can span substantially the entire forefoot area from the midtarsal area to the toe area and from the lateral side to the medial side to give support to the largest area of the sole of the user's foot. Dubner '621 also teaches that the same supportive device can span substantially the entire rear foot area including the area from the midtarsal area to the heel and from the lateral side to the medial side (see Figures 1-3) for the same reason. Therefore, it would have been obvious, to one of ordinary skill in the art at the time the invention was

Art Unit: 3728

made, to make the forefoot and heel areas of Coplans '592 span the entire forefoot and heel areas as shown in Dubner '621 to give support to the largest area of the user's foot and to spread out the impact of the foot with the ground over the largest area possible. Kraeuter et al. '820 shows, in Figures 7 and 8, that the forefoot area of a foot support device can be concave upward in the forefoot area to follow the natural curvature of the forefoot area of a user's foot and make the fit feel more comfortable doing so. Therefore, it would have been obvious to make the forefoot area of the references as modified and applied immediately above, concave, as shown in Kraeuter et al. '820, to allow it to follow along the natural contour of the user's foot while giving a feeling of comfort on the user's foot.

3. Claims 1, 5-11, 15-17, 19-21, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderie 4,922,631 in view of Dubner 3,903,621 and Kraeuter et al. 5,915,820. Anderie '631 discloses substantially all the limitations of the claims including the following: a torsion system (9 in figure 1, or 116, 118, 119 shown in Figure 8 or that shown in Figure 4); a forefoot portion (119 or that where 111 is located in Figure 4); rear foot portion (118 or that where 112 is located in Figure 4); intermediate portion (116 of Figure 8 or 110, 114, 115 of Figure 4); intermediate portion coupling together forefoot and rear foot portions (see Figures) and made of a material that allows rotation of the forefoot portion relative to the rear foot portion about the longitudinal line of the torsion system (see Abstract or column 4, lines 29-50); intermediate portion includes a rib (see Figure 6, ribs are 114, 115, and 116 while base is 113); rib tuned torsionability (see column 5, lines 62-66); at least one aperture 120 in rear foot portion; rear foot, forefoot and intermediate portions form a single plate (see Figures); the plate is substantially rigid in a horizontal plane (see column 4, lines 39-51); plate is between 1 and 15 mm thick (see column 4, lines 10-15); the width of the intermediate portion is less than that of the rear foot and forefoot portions (see Figures); plate comprises nylon (see column 4, line 7); plate comprises composite material (see Column 4, lines 55-59) including glass; front and rear foot portions comprise different material properties than intermediate portion (see column 4, lines 3-15 and

Art Unit: 3728

55-63); aperture formed in intermediate portion (that area between 115 and 166 or 116 and 114 in figure 6); outsole 2. Anderie '631 does not teach or show that the forefoot portion of the torsion system spans the entire forefoot area of the sole or that the rear foot portion spans the entire rear foot area of the sole or that the forefoot area has a generally smooth concave contour along the longitudinal axis. Dubner '621 shows that a supportive innersole device can span substantially the entire forefoot area from the midtarsal area to the toe area and from the lateral side to the medial side to give support to the largest area of the sole of the user's foot. Dubner '621 also teaches that the same supportive device can span substantially the entire rear foot area including the area from the midtarsal area to the heel and from the lateral side to the medial side (see Figures 1-3) for the same reason. Therefore, it would have been obvious, to one of ordinary skill in the art at the time the invention was made, to make the forefoot and heel areas of Anderie '631 span the entire forefoot and heel areas as shown in Dubner '621 to give support to the largest area of the user's foot and to spread out the impact of the foot with the ground over the largest area possible. Krauter et al. '820 shows, in Figures 7 and 8,, that the forefoot area of a foot support device can be concave upward in the forefoot area to follow the natural curvature of the forefoot area of a user's foot and make the fit feel more comfortable doing so. Therefore, it would have been obvious to make the forefoot area of the references as modified and applied immediately above, concave, as shown in Krauter et al. '820, to allow it to follow along the natural contour of the user's foot while giving a feeling of comfort on the user's foot.

4. Claims 22-23 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claim 21 in paragraph 4 above in view of Nagano et al. 5,446,977. The references as applied to claim 21 in paragraph 4 above disclose all the limitations of the claims except for the footwear being a cycle shoe and having a cleat attachment. Nagano et al. teaches that it is desirable to have a torsion system placed within a cycle shoe, with a cleat attachment (8, 9a, 9), to keep the foot located properly on the pedal of a bicycle to allow for the largest driving force possible to be

Art Unit: 3728

transferred from the user's leg to the pedal. Therefore, it would have been obvious to place the torsion system of the references as applied to claim 21 in paragraph 4 above into a bicycle shoe, such as that shown in Nagano et al. '977, to aid in keeping the foot properly located on the pedal to get the most work out of the energy expelled by the rider and to help in correcting the twisting of the user's leg due to the pedaling of the bicycle. Nagano et al. '977 also shows the shoe containing an upper as seen in Figures 8-9.

5. Claims 2-4 and 11-14, and 18 are rejected under 35 U.S.C. 103(a) as being obvious over the references as applied to claims 1 and 9 in paragraphs 3 and 4 above. The references as applied to claims 1 and 9 in paragraphs 3 and 4 above disclose all the limitations of the claims except for the specific degree of rotation of the forefoot portion to the rear foot portion, the thickness of the intermediate portion or the intermediate portion being made of graphite. It appears that it would have been a mere matter of testing and optimization to find the degree of rotation of the forefoot portion with respect to the rear foot portion that would best aid the foot to rotate the desired amount to counter the rotation of the foot due to knee movement. It also appears that it would have been a mere matter of testing and optimization to find the thickness and material makeup (as the material make up of the intermediate also is a factor in determining the necessary thickness needed) of the intermediate portion that would allow the desired rotation and to customized the torsion system to different people's feet. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to find the proper angle of rotation of the forefoot portion to the rear foot portion and the thickness and material of the intermediate portion that would best compensate for the twisting motion performed by the knee on the foot.

Art Unit: 3728

Response to Arguments

6. Applicant's arguments with respect to the limitations in the claims of the contour of the forefoot area and the spanning of the forefoot section and rear foot section of the torsional member, as well as those pertaining to Lain and Toschi have been considered but are moot in view of the new ground(s) of rejection. Applicant's arguments filed November 20, 2001 have been fully considered but they are not persuasive. Applicant argues that Coplans '597 functions differently than that of the instant application. This argument is not clearly understood. The references, as combined above, meet the claimed structural limitations of the claims of the instant application. Although they may function in a different manner, the limitations in the claims are structural limitations that are met by the references as cited. Applicant's arguments with respect to Nagano are also unclear. It also appears that applicant is arguing the functionality of the references rather than the structure as claimed by the applicant and present in Nagano. The fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 3728

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Telephone inquiries regarding the status of applications or other general questions, by persons entitled to the information, "should be directed to the group clerical personnel and not to the examiners. In as much as the official records and applications are located in the clerical section of the examining groups, the clerical personnel can readily provide status information without contacting the examiners", M.P.E.P. 203.08. The Group clerical receptionist number is (703) 308-1148.

If in receiving this Office Action it is apparent to applicant that certain documents are missing, e.g., copies of references cited, form PTO-1449, form PTO-892, etc., requests for copies of such papers or other general questions should be directed to Tech Center 3700 Customer Service at (703) 306-5648, email CustomerService3700@uspto.gov.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony D Stashick whose telephone number is 703-308-3876. The examiner can normally be reached on Tuesday through Friday from 8:30 am until 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mickey Yu can be reached on 703-308-2672. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9302 for regular communications and 703-872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.


Art Unit: 3728

Other helpful telephone numbers are listed for applicant's benefit.

Allowed Files & Publication	(703) 305-8322
Assignment Branch	(703) 308-9287
Certificates of Correction	(703) 305-8309
Drawing Corrections/Draftsman	(703) 305-8404/8335
Fee Increase Questions	(703) 305-5125
Intellectual Property Questions	(703) 305-8217
Petitions/Special Programs	(703) 305-9282
Terminal Disclaimers	(703) 305-8408
Informal Fax for 3728	(703) 308-7769

If the information desired is not provided above, or has been changed, please do not call the examiner (this is the latest information provided to him) but the general information help line below.

Information Help line	1-800-786-9199
Internet PTO-Home Page	http://www.uspto.gov/



Anthony D Stashick
Examiner
Art Unit 3728

ADS
December 1, 2001